## **ABSTRACT**

The present invention relates to a novel method for the detection and characterization of an unknown nucleic acid-binding protein from a biological sample. More particularly, the method of the instant invention includes the steps of forming nucleic acid-protein complexes, the subsequent selective degradation of unbound nucleic acid molecules, the detection of nucleic acid-protein complexes, and finally, the characterization of the nucleic acid-binding protein. Additionally, compositions and methods are provided in the present invention for detecting and characterizing unknown nucleic acid-binding proteins from biological samples using immobilized nucleic acid molecules in reaction vessels having a multitude of wells.